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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/077,393	02/15/2002	Charles C. Anderson	84071AEK	3273

7590

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EXAMINER

THOMPSON, CAMIE S

ART UNIT

PAPER NUMBER

1774

DATE MAILED: 04/28/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/077,393

Applicant(s)

ANDERSON ET AL.

Examiner

Camie S Thompson

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1774

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Amendment filed February 13, 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-41 is/are pending in the application.
- 4a) Of the above claim(s) 26-29 and 34-39 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-25,30-32,40 and 41 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

1. Applicant's amendment and accompanying remarks filed February 13, 2004 have been acknowledged.
2. Examiner acknowledges amended claims 1 and 14.
3. The objection to the abstract is withdrawn due to applicant's amended abstract.
4. The objection to claim 14 is withdrawn due to applicant's amended claim 14.
5. The rejection of claims 1-25, 30-32 and 40-41 under 35 U.S.C. 103(a) as being unpatentable over Comiskey et al., U.S. Patent Number 6,473,072.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1-5, 13-15, 19-21, 30-32 and 40-41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Welsh et al., U.S. Patent Number 6,469,267 in view of Patel et al., U.S. Patent Number 6,451,505.

Welsh discloses a sensor or touchscreen that comprises a transparent cover sheet having a first conductive layer containing an intrinsically conductive polymer such as polyethylenedioxythiophene and spacer dots as per instant claims 1-5, 13, 20-21, 23-25 and 30-32 (see column 2, lines 14-40; Figure 7 and column 4, lines 1-50). Additionally, the Welsh

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reference discloses that a second conductive layer separated from the first conductive layer by spacer dots as per instant claim 1 (see Figure 7). The Welsh reference does not disclose the use of a film forming binder in the first conductive layer or the use of a polyanion in the multilayer as per instant claims 14 and 15. Patel teaches an imageable element comprising a first and second conductive layers wherein a polythiophene polymer is used (see column 11, lines 1-25). Additionally, the Patel reference teaches that the first conductive layer absorbs actinic radiation and comprises a film forming resin such as vinyl acetate, polyhydroxy or polysulfonic acids as per instant claims 1, 14-15 and 19 (see column 4, lines 48-50 and column 9, lines 4-12). The use of a film forming binder is useful for photosensitive compositions. Therefore, it would have been obvious to one of ordinary skill in the art to use a film forming resin in the first conductive layer to absorb radiation in the UV, visible or both spectral ranges as per instant claims 40-41 (see Patel column 3, line 51-column 4, line 60).

8. Claims 1, 5-12, 16-18 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Welsh et al., U.S. Patent Number 6,469,267 in view of Patel et al., U.S. Patent Number 6,451,505 and in further view of Comiskey et al., U.S. Patent Number 6,473,072.

Welsh discloses a sensor or touchscreen that comprises a transparent cover sheet having a first conductive layer containing an intrinsically conductive polymer such as polyethylenedioxythiophene and spacer dots as per instant claim 1 (see column 2, lines 14-40; Figure 7 and column 4, lines 1-50). Additionally, the Welsh reference discloses that a second conductive layer separated from the first conductive layer by spacer dots as per instant claim 1 (see Figure 7). The Welsh reference does not disclose the use of a film forming binder in the first conductive layer in the multilayer as per instant claim 1. Patel teaches an imageable

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element comprising a first and second conductive layers wherein a polythiophene polymer is used (see column 11, lines 1-25). Additionally, the Patel reference teaches that the first conductive layer absorbs actinic radiation and comprises a film forming resin such as vinyl acetate as per instant claim 1 (see column 4, lines 48-50 and column 9, lines 4-12). The use of a film forming binder is useful for photosensitive compositions. Therefore, it would have been obvious to one of ordinary skill in the art to use a film forming resin in the first conductive layer to absorb radiation in the UV, visible or both spectral ranges as per instant claims 40-41 (see Patel column 3, line 51-column 4, line 60).

Neither Welsh nor Patel disclose that the spacers are a water-wettable polymeric resin as per instant claims 5-12 and 22. Comiskey teaches a display device that comprises a multilayer and touchscreen wherein the multilayer has spacer elements comprised of "water-reducible" monomers and polymeric resins such as acrylic, polyester or polysaccharide, which can be cross-linked (see column 8, lines 30-40 and column 7, lines 31-53). The use of spacer elements separate the cover sheet from the substrate and help complete the electrical circuit. The non-water-wettable spacer dots protect the circuit. Therefore, it would have been obvious to one of ordinary skill in the art to have the spacer elements be comprised of a material such as polysaccharide or polyester in order to have an electrical circuit that is resistant to moisture. Additionally, neither Patel nor Welsh disclose the use of conductivity enhancing compounds as per instant claims 16-18. Column 7, lines 31-35 of the Comiskey reference discloses the use of polyvinyl alcohol as a conductivity enhancing polymer used in the touchscreen or OLED as per instant claims 16-18. The PVA enhances the conductivity of the first and second layers. Therefore, it would have been obvious to one of ordinary skill in the art to use PVA in the

touchscreen in order to ensure contact between the first and second layers so that data is created and transmitted.

Response to Arguments

9. Applicant's arguments with respect to claims 1-25, 30-32 and 40-41 have been considered but are moot in view of the new ground(s) of rejection.

Any inquiry concerning this communication or earlier communication from the examiner should be directed to Camie S. Thompson whose telephone number is (571) 272-1530. The examiner can normally be reached on Monday through Friday from 7:30 am to 4:00 pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cynthia H. Kelly, can be reached at (571) 272-1526. The fax phone number for the Group is (703) 872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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